

## AMENDMENTS TO CLAIMS

This listing of claims will replace all prior versions, an listings, of claims in the application:

### Listing of Claims:

1. (Currently Amended) A method of fabricating ~~thin film transistor~~ a TFT array, comprising the steps of;

forming ~~the a~~ gate electrode and using ~~[[the]]~~ a replacement method of ~~[[the A-Si]]~~ an  $\alpha$ -Si seed which is defined by a first mask to deposit ~~the a~~ first wiring on the substrate, and defining the gate electrode of the ~~thin film transistor~~ TFT array;

forming ~~the a~~ dielectric layer, the ~~[[A-Si]]~~  $\alpha$ -Si layer, and an N+ layer, ~~and the layers deposit being deposited~~ in order, and the dielectric ~~covers on~~ covering the ~~up top~~ side of the gate electrode, and the ~~A-Si~~  $\alpha$ -Si layer being between the dielectric layer and the N+ Si layer;

~~defining the contact window and using the a~~ second mask to define multiple contact windows;

depositing ~~the a~~ transparent conducting layer, and the transparent conducting material placed on the multiple contact windows;

defining ~~the a~~ source and ~~the~~ drain electrodes and using ~~the a~~ third mask to define the source electrode and the drain electrode in the ~~thin film transistor~~ TFT array;

etching channel; it using coverage of ~~the a~~ fourth mask to etch the component contact window as a conducting channel; and

placing a passivation layer, and depositing a passivation layer, and the fourth mask placed on the passivation layer, and processing etching on the passivation layer of non-fourth mask coverage for implementing ~~thin film transistor~~ TFT array.

2. (Currently Amended) The method of fabricating ~~thin film transistor~~ a TFT array according to the claim 1, wherein the replacement method ~~can be~~ is a chemical plating method, ~~and it that~~

uses ~~the~~ a low-resistance metal ~~which~~ with stronger oxidation ability ~~to~~ than Si, and works with chemical plating method to process oxidation-reduction reaction, and the area of the ~~[[A-Si]]~~  $\alpha$ -Si definition is replaced by ~~the~~ a first conducting metal.

3. (Canceled)

4. (Currently Amended) The method of fabricating ~~thin film transistor~~ a TFT array according to ~~the~~ claim 1, the process of the defining gate electrode used the deposition methods to define, and ~~the~~ a conducting metal ~~depositing~~ deposited on the gate electrode can be made of Cu, Al, Ag, Ni, Ti, W, or Mo.

5. (Currently Amended) The method of fabricating ~~thin film transistor~~ a TFT array according to ~~the~~ claim 1, the process of the forming dielectric layer can use ~~the~~ a continuous deposition method to form the dielectric layer with oxide material.

6. (Currently Amended) The method of fabricating ~~thin film transistor~~ a TFT array according to ~~the~~ claim 1, the process of the forming dielectric layer can use low-pressure chemical vapor deposition-~~LPCVD~~ (LPCVD), or plasma enhanced chemical deposition-~~PECVD~~ PECVD) to implement.

7. (Currently Amended) The method of fabricating ~~thin film transistor~~ a TFT array according to ~~the~~ claim 1, ~~the~~ a material of the transparent conducting layer in the process of the depositing transparent conducting layer ~~can use ITO or IZO~~ is Indium Tin Oxide (ITO) or Indium-Doped Zinc Oxide (IZO) material to implement.

8. (Currently Amended) The method of fabricating ~~thin film transistor~~ a TFT array according to ~~the~~ claim 1, the process of the defining gate electrode and drain electrode uses stronger oxidation ability in the second conducting metal rather than Si has to implement the replacement,

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and ~~the~~ a partial N+ Si layer is as a N+ Si seed to process oxidation-reduction reaction, and the replaced parts of the N+ Si seed are defined as the source electrode and the drain electrode.

9. (Currently Amended) The method of fabricating ~~thin film transistor~~ a TFT array according to ~~the~~ claim 1, ~~the~~ a second conducting metal is made of Cu, Al, Ag, Ni, Ti, W, or Mo materials.

10. (Currently Amended) The method of fabricating ~~thin film transistor~~ a TFT array according to ~~the~~ claim 1, the ~~fourth~~ third masking process can use a positive-type of ~~the~~ a photo-resist to process shielding.